3:15 p.m. Small Diameter Gravity Sewers

Robert P. G. Bowker J. M. Smith & Assoc.

D. H. Houck Assoc., Inc.

Silver Spring, MD 9:30 a.m. Biological Phosphorus Removal

Cincinnati, OH

8:30 a.m. Fine Bubble Diffusers Daniel H. Houck

5:00 p.m. Adjourn

Second Day

4:15 p.m. Secondary Clarification and In-Channel

Clarification in an Oxidation Ditch

Richard Otis

Official Business
Penalty for Private Use

United States Environmental Protection Agency

Center for Environmental Research Information Cincinnati OH 45268

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United States Environmental Protection Agency Municipal Environmental

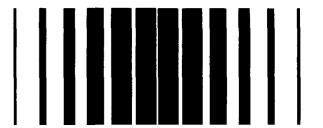
Research Laboratory (MERL)

Center for Environmental Research Information (CERI)

Technology Transfer

# **New Municipal** Wastewater **Treatment Technology**

New Orleans, LA-March 12-13, 1984 Orlando, FL-March 15-16, 1984 San Francisco, CA-April 2-3, 1984 Portland, OR-April 5-6, 1984 St. Louis, MO-April 30-May 1, 1984 Minneapolis, MN-May 3-4, 1984 Phoenix, AZ-May 14-15, 1984 Denver, CO-May 17-18, 1984 Boston, MA-June 7-8, 1984 Albany, NY-June 18-19, 1984 Baltimore, MD-June 21-22, 1984



to U.S. GOVERNMENT PRINTING OFFICE: 1984-759-015/7260

## **Background and Purpose**

The Clean Water Act of 1977, as amended, encourages the development and implementation of "Innovative and Alternative" technologies and improved management and operation of wastewater and sludge collection, treatment, and disposal systems. Special emphasis is given to technologies that reduce costs, conserve or recover energy, reclaim/reuse water, recycle wastewater constituents, or improve operational reliability or improve toxics management.

Since 1979, more than 25 Technology Transfer seminars covering advances in municipal wastewater treatment technology have been conducted across the country. Developments in this field continue at a dramatic pace.

This new seminar series is being conducted in cooperation with several State environmental agencies. It will present information on several new technologies not covered in previous seminars as well as newly developed design, performance, and operating data on some of those technologies that were presented previously.

These seminars are intended primarily for those involved in the design and/or approval of municipal wastewater treatment systems and will be especially beneficial to those involved in evaluating "Innovative and Alternative" systems.

### Registration and Hotel Information

There is no registration fee and you may register for any one of the eleven seminars. We recommend, however, that you choose the seminar to be given in your EPA region since both regional and State personnel will be participating in the sessions. Because attendance is limited we request that you register early and indicate on the registration form three choices in order of preference (1st. 2nd. 3rd). For further information, contact Ms. Sheri Marshall, Seminar Coordinator, (301) 468-2500.

Arrangements have been made for a block of rooms at each hotel where seminars are to be held. Special rates are available to seminar attendees. Reservations should be made directly with the hotel and you must state that you are attending the EPA seminar to receive the special quest room rate.

### Seminar Locations and Dates

- 1. New Orleans, LA Monteleone Hotel 214 Rue Royale March 12-13, 1984 (504) 523-3341
- 2. Orlando, FL Holiday Inn 6515 International Drive March 15-16, 1984 (305) 351-3500
- 3. San Francisco, CA Westin Miyako 1625 Post Street April 2-3, 1984 (415) 922-3200
- 4. Portland, OR Portland Marriott 1401 S.W. Front Avenue April 5-6, 1984 (503) 226-4000
- 5. St. Louis, MO Sheraton - West Port Inn 191 West Port Plaza April 30-May 1, 1984 (314) 878-1500
- 6. Minneapolis, MN **Hyatt Regency** 1300 Nicollett Mall May 3-4, 1984 (612) 370-1234
- 7. Phoenix, AZ Hotel Westcourt 10220 N. Metro Parkway East May 14-15, 1984 (602) 997-5900
- 8. Denver, CO Brown Palace 321 17th Street May 17-18, 1984 (303) 297-3111
- 9. Boston, MA Copley Plaza 138 St. James Avenue June 7-8, 1984 (617) 267-5300

- 10. Albany, NY Albany Hilton State and Lodge Streets June 18-19, 1984 (518) 462-6611
- 11. Baltimore, MD Baltimore Hilton 101 W. Favette Street June 21-22, 1984 (301) 752-1100

	SEMINAR PROGRAM
First Day	
7:30 a.m.	Registration
8:30 a.m.	Welcome
8:45 a.m.	Purpose
9:15 a.m.	National I/A Program Summary EPA-Office of Water Program Operations Washington, DC
	EPA-Municipal Environmental Research Laboratory Cincinnati, OH
10:15 a.m.	Break
10:30 a.m.	Applied Regional Research Relating to I/A Technology
l 1:00 a.m.	Land Treatment Dr. A. T. Wallace University of Idaho Moscow, ID
l 1:45 a.m.	Lunch
1:00 p.m.	Large Soil Absorption Systems Richard Otis RSE, Inc. Madison, WI
2:00 p.m.	Vacuum-Assisted Drying Beds A. T. Wallace
3:00 p.m.	Break

# TREATMENT TECHNOLOGY **~** ~ NEW MUNICIPAL WASTEWATE -U.S. Environmental

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registering

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